



OXFORD ENVIRONMENTAL, INC.

Corporate Office:  
43 Route 46 East • #702 • Pine Brook, New Jersey 07058  
973.244.0600 • Fax 973.244.0722 • tim@oxfordenv.com

201833



# Fax

To: NICK MAGRIPLES, EPA	From: TIM FRANCISCO
Fax: (732) 906-4182	Pages: 18
Phone: (732) 906-6930	Date: 11/17/00
Re: CORNELL-DUBILIER	CC:

☐ Urgent☐ For Review☐ Please Comment☐ Please Reply☐ Please Recycle

Message:

WASTE CHARACTERIZATION RESULTS FOR  
DWM STABILIZATION WASTE.

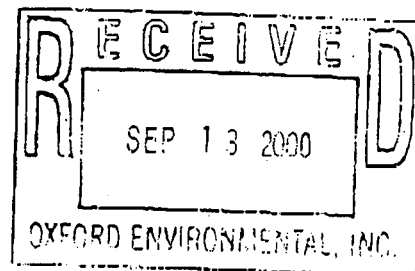
**ACCREDITED LABORATORIES, INC.***Implementing Tomorrow's Technology, Today™*

-1-

**Analytical Data Report**

for

**Oxford Environmental**  
43 Rt. 46 East  
Pine Brook, NJ 07058

**Project: Cornell - Dublier Electronics**

Accredited Laboratories Case No.: 9289  
Date Received: 09/01/00

<u>Field ID</u>	<u>Laboratory Sample #</u>
A02-01	200010644
A02-02	200010645

Accredited Laboratories, Inc. New Jersey Certification  
Number 12007. This data has been reviewed and accepted by:

Theodore C. Gaydos  
Technical Director

(732) 541-2025

**CORPORATE OFFICES**

FAX (732) 541-1383

20 Pershing Avenue  
Carteret, New Jersey 07008



## ACCREDITED LABORATORIES, INC.

20 PERSHING AVENUE  
CARTERET, NEW JERSEY 07008  
PHONE: (732) 541-2025 / (800) ALI-LABS

## CHAIN OF CUSTODY FORM

PAGE \_\_\_\_\_ OF \_\_\_\_\_

CLIENT: Oxford Environmental  
ADDRESS: 43 Route 46 E Suite 702  
CITY: Pine Brook  
STATE: NJ ZIP: 0758

PROJECT: Cornell-Dotier Electronics  
CONTACT: L. Farnsworth  
PHONE: 973/244-0600  
FAX: 973/244-0722

ALI SAMPLE #	FIELD ID	*C	*M	DATE / TIME SAMPLED	SAMPLE DESCRIPTION	ANALYSIS
0010644	A02-01	1	S	08/31/00 1600H	Soil-Area #2 Corp	PCB, TUP Metals
0010645	A02-02	1	X	08/31/00 1600H	Gr-Area #2 Corp	PCB
<del>W690-01</del>	<del>1</del>	<del>X</del>		<del>08/31/00 1600H</del>	<del>Hexane wipe T1</del>	<del>PCB No sample</del>
<del>W690-02</del>	<del>1</del>	<del>X</del>		<del>08/31/00 1600H</del>	<del>Hexane wipe T2</del>	<del>PCB No sample</del>
<del>W690-03</del>	<del>1</del>	<del>X</del>		<del>08/31/00 1600H</del>	<del>Hexane wipe B</del>	<del>PCB No sample</del>
<del>W690-04</del>	<del>1</del>	<del>X</del>		<del>08/31/00 1600H</del>	<del>Hexane wipe C</del>	<del>PCB No sample</del>
<del>W690-05</del>	<del>1</del>	<del>X</del>		<del>08/31/00 1600H</del>	<del>Hexane wipe D</del>	<del>PCB No sample</del>
9/1/00 #0010645 malix soil						
*M = MATRIX    A-AQUEOUS    S-SOIL    G-SLUDGE    P-POTABLE WATER    O-OIL    F-FILTER    X-SOLID    L-LIQUID						

\*C = NO. CONTAINERS    TURNAROUND: 48 Hours (If Blank, Std. 3 weeks)

DELIVERABLES (Circle one):    STD    REDUCED    FULL    NY-ASP    CLP I    CLP II

RELINQUISHED BY		RECEIVED BY		DATE	TIME	PERSON
PRINT	SIGN	PRINT	SIGN			
J. Aruloo		W.M. Aruloo		8/31/00	4:45	P.M.
W.M. Aruloo		J. Aruloo		9/1/00	1:00	Aruloo

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: J. Aruloo

SIGN:

COMMENTS: (No sample taken)

9289

## METHODOLOGY SUMMARY

### PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

### Toxic Characteristic Leaching Procedure - TCLP (EPA Method (1311))

Before the leaching procedure can be initiated, the information regarding the wet % and dry % solid of the solid sample as well as the utilization of the extraction fluid, either #1 or #2, must be determined.

For the Metal Analysis, a minimum of 100 grams is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate, if any, is saved. A 20X of extracted fluid, either #1 or #2, is charged in the glass or plastic extraction bottle and then rotated at 30 +/- 2 rpm for 18 +/- 2 hours. After rotation, the sample is filtered through 0.6 to 0.8 um glass fiber filter. The filtrate is combined with the initial liquid, if any. This is referred as TCLP Leachate. The contaminants of Metals in the leachate is determined by EPA Method 7471 for mercury, Method 7060 for arsenic, Method 7740 for selenium and Method 6010 (ICAP) and/or Method 7000's (Flame-AA) for the rest of metals.

ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATA

CASE NUMBER 9289  
 SAMPLE NUMBER 0010644  
 DATA FILE >G6978  
 CLIENT NAME OE  
 FIELD ID A02-01

MATRIX Soil  
 DILUTION FACTOR 10  
 DATE EXTRACTED 09/06/00  
 DATE ANALYZED 09/06/00  
 ANALYZED BY JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	275
11104282	Aroclor-1221	U	275
11141165	Aroclor-1232	U	275
53469219	Aroclor-1242	U	275
12672296	Aroclor-1248	U	275
11097691	Aroclor-1254	24200 I	275
11096825	Aroclor-1260	U	275

Percent Solid of 60.7 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.
- R - Result exceeds residential surface soil standards.\*
- I - Result exceeds industrial surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup from Site  
Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9289
SAMPLE NUMBER	0010645
DATA FILE	>G6979
CLIENT NAME	OE
FIELD ID	A02-02

MATRIX	Soil
DILUTION FACTOR	10
DATE EXTRACTED	09/06/00
DATE ANALYZED	09/06/00
ANALYZED BY	JEFF

CAS#	COMPOUND	UG/KG.	MDL
12674112	Aroclor-1016	U	213
11104282	Aroclor-1221	U	213
11141165	Aroclor-1232	U	213
53469219	Aroclor-1242	U	213
12672296	Aroclor-1248	U	213
11097691	Aroclor-1254	18700 I	213
11096825	Aroclor-1260	U	213

Percent Solid of 78.2 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.
- R - Result exceeds residential surface soil standards.\*
- I - Result exceeds Industrial surface soil standards.\*

\* Flags are based on New Jersey Soil Cleanup from Site Remediation News Volume 06 Number 1.

ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATACASE NUMBER  
SAMPLE NUMBER  
DATA FILE  
CLIENT NAME  
FIELD IDPBLK38  
G6976MATRIX  
DILUTION FACTOR  
DATE EXTRACTED  
DATE ANALYZED  
ANALYZED BYSoil  
1  
09/06/00  
09/06/00  
JEFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.  
 REGULATED TCLP METALS  
 INORGANIC ANALYSIS DATA SHEET

Case #: 9289  
 Sample #: 0010644  
 Field ID: A02-01  
 Client Name: OF

Matrix: Leachate  
 Date Received: 09/01/00

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	1.00	1	5.00	P	09/07/00
7440-39-3	Barium	ND	.500	1	100.00	P	09/07/00
7440-43-9	Cadmium	ND	.100	1	1.00	P	09/07/00
7440-47-3	Chromium	ND	.100	1	5.00	P	09/07/00
7439-92-1	Lead	4.20	.500	1	5.00	P	09/07/00
7439-97-6	Mercury	ND	.002	2	.20	CV	09/08/00
7782-49-2	Selenium	ND	.500	1	1.00	P	09/07/00
7440-22-4	Silver	ND	.100	1	5.00	P	09/07/00

ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA



ACCREDITED LABORATORIES, INC.  
REGULATED TCLP METALS  
INORGANIC ANALYSIS DATA SHEETSample #: PBL050  
Field ID: PREPBLANKMatrix: Leachate  
Date Prepared: 09/06/00

CAS No.	Element	Result MG/L	MDL MG/L	Dilution Factor	Regulatory Level	Method	Date Analyzed
7440-38-2	Arsenic	ND	.500	1	5.00	P	09/06/00
7440-39-3	Barium	ND	.250	1	100.00	P	09/06/00
7440-43-9	Cadmium	ND	.050	1	1.00	P	09/06/00
7440-47-3	Chromium	ND	.050	1	5.00	P	09/06/00
7439-92-1	Lead	ND	.250	1	5.00	P	09/06/00
7439-97-6	Mercury	ND	.001	1	.20	CV	09/08/00
7782-49-2	Selenium	ND	.250	1	1.00	P	09/06/00
7440-22-4	Silver	ND	.050	1	5.00	P	09/06/00

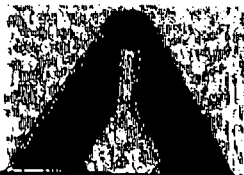
ND - Element analyzed for but not detected.

P - Analyzed by ICP

CV - Analyzed by Cold Vapor

F - Analyzed by GFA

A - Analyzed by flame AA

**ACCREDITED LABORATORIES, INC.***Implementing Tomorrow's Technology, Today™*

-1-

**Analytical Data Report**

for

**Oxford Environmental**

43 Rt. 46 East

Pine Brook, NJ 07058

**Project: Cornell - Dubilier Electronics**

Accredited Laboratories Case No.: 9343

Date Received: 09/06/00

**Field ID****Laboratory  
Sample #**

A-4-C-3

200010868

A-4-C-2

200010869


A-3-C-1

200010870

0831-10

200010871

Accredited Laboratories, Inc. New Jersey Certification  
Number 12007. This data has been reviewed and accepted by:

  
Theodore C. Gaydos  
Technical Director

(732) 541-2025

**CORPORATE OFFICES**

20 Pershing Avenue

Carteret, New Jersey 07008

FAX (732) 541-1383



## CHAIN OF CUSTODY FORM

PAGE 1 OF 1



CLIENT	OXFORD ENVIRONMENTAL		
ADDRESS	43 ROUTE 46 EAST, SUITE 702		
CITY	PINE BROOK		
STATE	NJ	ZIP	07058

PROJECT	CORNELL-DUBILIER ELECTRONICS SITE
CONTACT	TIM FRANCISCO
PHONE	(973) 244-0600
FAX	(973) 244-0722

[illegible]

TURNAROUND: 1 WEEK (If Blank, Std. 3 weeks)

DELIVERABLES (Circle one)	STD	REDUCED	FULL	NY-ASP	CLP I	CLP II
---------------------------	-----	---------	------	--------	-------	--------

RELINQUISHED BY:		RECEIVED BY:		ORGANIZATION	DATE	REASON
PRINT	SIGN	PRINT	SIGN			
T. FRANCISCO		Gudoy		ACT	9/6/00	1750 Am JTS

PERSON(S) ASSUMING RESPONSIBILITY FOR SAMPLING: PRINT: FRANCISCO

**SIGN**

	* Analyze for TOX only if sample amount is sufficient.
COMMENTS:	A-3-C-1 composite in lab.
	Sample Temp 2 Ambient.

9343

## METHODOLOGY SUMMARY

### PCB's - EPA 8082 (soil/solid)

A 30 gram portion of solid is mixed with anhydrous sodium sulfate and is extracted with 1:1 methylene chloride and acetone using sonication technique. The extract is separated from the sample by either centrifugation or filtration. The extract is then solvent-exchanged to hexane in a K-D concentrator to a final volume of 10 ml. The extract is injected into a gas chromatograph and the compounds in the GC effluent are detected by an electron capture detector.

### Flash Point - EPA 1010

The sample is heated at a slow constant rate with continual stirring. A small flame is directed into the cup at regular intervals with simultaneous interruption of stirring. The flash point is the lowest temperature at which application of the test flame ignites the vapor above the sample. The method is followed according to EPA "Test Methods for Evaluating Solid Waste", SW-846, 3rd ed., 1986.

### Total Organic Halides - (solid)

Approximately 1.0 grams of sample is oxidized by combustion in a bomb containing oxygen under pressure. The chlorine thus liberated from organic matrix is absorbed in a sodium carbonate solution. The amount of chloride in the rinsate is determined by a standard mercuric nitrate solution titrimetrically. Then a 5 gram sample is extracted with deionized distilled water for four hours. The inorganic chloride concentration in the leachate is determined by standard mercuric nitrate solution titrimetrically. The total organic halides is determined by the differences between the total chloride amount generated from the bomb combustion procedure and the inorganic chloride generated from the leaching procedure.

ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343
SAMPLE NUMBER	0010868
DATA FILE	>G7016
CLIENT NAME	OE
FIELD ID	A-4-C-3

MATRIX	Solid
DILUTION FACTOR	10
DATE EXTRACTED	09/11/00
DATE ANALYZED	09/12/00
ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	173
11104282	Aroclor-1221	U	173
11141165	Aroclor-1232	U	173
53469219	Aroclor-1242	U	173
12672296	Aroclor-1248	U	173
11097691	Aroclor-1254	6690	173
11096825	Aroclor-1260	U	173

Percent Solid of 96.5 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.  
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343
SAMPLE NUMBER	0010869
DATA FILE	>G7017
CLIENT NAME	OE
FIELD ID	A-4-C-2

MATRIX	Solid
DILUTION FACTOR	10
DATE EXTRACTED	09/11/00
DATE ANALYZED	09/12/00
ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	432
11104282	Aroclor-1221	U	432
11141165	Aroclor-1232	U	432
53469219	Aroclor-1242	U	432
12672296	Aroclor-1248	U	432
11097691	Aroclor-1254	26500	432
11096825	Aroclor-1260	U	432

Percent Solid of 38.6 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343	MATRIX	Solid
SAMPLE NUMBER	0010870	DILUTION FACTOR	20
DATA FILE	>G7018	DATE EXTRACTED	09/11/00
CLIENT NAME	OE	DATE ANALYZED	09/12/00
FIELD ID	A-3-C-1	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	333
11104282	Aroclor-1221	U	333
11141165	Aroclor-1232	U	333
53469219	Aroclor-1242	U	333
12672296	Aroclor-1248	U	333
11097691	Aroclor-1254	3070	333
11096825	Aroclor-1260	U	333

Percent Solid of 100. is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATA

CASE NUMBER	9343	MATRIX	Sludge
SAMPLE NUMBER	0010871	DILUTION FACTOR	20
DATA FILE	>G7019	DATE EXTRACTED	09/11/00
CLIENT NAME	OE	DATE ANALYZED	09/12/00
FIELD ID	0831-10	ANALYZED BY	CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	362
11104282	Aroclor-1221	U	362
11141165	Aroclor-1232	U	362
53469219	Aroclor-1242	U	362
12672296	Aroclor-1248	U	362
11097691	Aroclor-1254	4540	362
11096825	Aroclor-1260	U	362

Percent Solid of 92.1 is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.



ACCREDITED LABORATORIES, INC  
PCB ORGANIC ANALYSIS DATACASE NUMBER  
SAMPLE NUMBER  
DATA FILE  
CLIENT NAME  
FIELD IDPBLK43-A  
>67003MATRIX  
DILUTION FACTOR  
DATE EXTRACTED  
DATE ANALYZED  
ANALYZED BY

Soil

1

09/11/00

09/11/00

CLIFF

CAS#	COMPOUND	UG/KG	MDL
12674112	Aroclor-1016	U	16.7
11104282	Aroclor-1221	U	16.7
11141165	Aroclor-1232	U	16.7
53469219	Aroclor-1242	U	16.7
12672296	Aroclor-1248	U	16.7
11097691	Aroclor-1254	U	16.7
11096825	Aroclor-1260	U	16.7

Percent Solid of 100. is used for all target compounds.

- B - Indicates compound found in associated blank.
- J - Indicates compound concentration found below MDL.
- U - Indicates compound analyzed for but not detected.
- E - Indicates result exceeds highest calibration standard.
- D - Indicates result is based on a dilution.

ACCREDITED LABORATORIES, INC.  
GENERAL CHEMISTRY ANALYSIS DATA

Case #: 9343  
Sample #: 0010871  
Client Name: OE  
Field Number: 0831-10

Matrix: Sludge  
Date Received: 09/06/00  
% Moisture: 7.9

ANALYTES	RESULTS	MDL	UNITS	DILUTION FACTOR	METHOD RESULTS	BLANK MDL	ANALYSIS DATE
Solids, Percent	92.1	0.10	%	1.			09/12/00
Flash Point	>200	80.	°F	1.			09/11/00
Total Organic Halogen	1450.	10.9	mg/Kg	1.	ND	10.0	09/12/00